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STATISTICAL METHODS IN EDUCATION

BY

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The Editorial comment on my last article pleading for the scientific attitude has been very encouraging. So I venture to send this second article of the series planned.

Another remark that was seriously made to me after my first lecture appealing to the audience to adopt the scientific attitude was this.

"Is it not a self-evident fact that pupils will understand better if taught in the vernacular? *The burden of proof therefore lies on the opponents of vernacularisation.*"

I have dealt with the self-evident fact in my previous article. Ignoring the allegation that I am an opponent of vernacularisation—I have several times reiterated that I am not—on whom does the burden of proof lie? Let us take any other question. One man wants the existing system to be changed; another opposes the change. On whom does the burden of proof lie? If we adopted the scientific attitude would we not say that the burden of proof should lie on the one who wants the existing system changed? Let me ask a teacher to change his present method of teaching and adopt a new method and he asks me to prove that the change would be for the better: when the teacher wants a change which I oppose he still insists the burden of proof is on me. With him it seems always to be a case of "Heads, I win; tails, you lose." Such is the consistency of our logic.

A very superficial study of the question of the medium of instruction showed me that if we are to find the real cause of the low standard of attainments we must seek elsewhere. Until some one proves that the change in the medium of instruction by itself does raise the standard sufficiently high to give us cause for satisfaction we ought to seek for other probable causes and suitable remedies.

One such remedy most frequently suggested and which Headmasters are blamed for failing to apply is "stricter promotions." The S. S. L. C. Examiners have with unfailing regularity been advising stricter promotions. The following is a specimen.

"Year after year the examiners' report has drawn the attention of heads of schools to the need for preventing unworthy students from getting into Form VI and sitting for the examination. Stricter promotion and stricter selection were the remedies so far suggested. But these have not been applied."

Because the patient has not improved does it necessarily follow that the prescribed medicine has not been administered?

Many Headmasters have been examiners for the S. S. L. C. All of these have during their tenure of office as examiners advised this remedy of stricter promotions. How many of these have applied to their own schools this remedy of their own? What percentage have they been detaining? By how much have their results improved? Why not—as advertisements of fat-reducing remedies do—give us pictures of their schools before and after using their patent remedy?

How are stricter promotions calculated to raise the standard of attainments? Is this improvement real or only apparent? It is worth while considering this.

A boy is not up to the standard. We detain him. Does he improve by the detention? It is the common experience of teachers all the world over that very few detained boys do improve. Every teacher will admit the truth of "once a repeater, always a repeater." Every teacher knows that generally the worst boys in a class are the detained boys of the previous year.

However for purposes of argument let us assume that all detained boys improve. Let us assume also that in a certain class all the boys are kept a second year. This raises the standard; but is this real? Are not the boys a year older?

Compare these two classes. Form I Section B is better than Form I Section A. But the average age of Section B is 15 years while that of A is 13 years. Is a 15 year old boy who knows more than a 13 year old really better than the 13 year old? Can we take credit for raising the standard by systematically keeping boys two years in every class so that at the end our sixth form average age is 25?

Detention raises the standard but at the same time raises the age. What should be aimed at is raising of the standard without increasing the average age of the class.

'Stricter promotions,' advise the experts. Are promotions strict or lax?

Take the figures for any district or for the whole Presidency and study them. Here are figures of the total strength of all classes of all secondary schools in one whole district.

| Form | I | II | III | IV | V | VI |
|------|-----|-----|-----|-----|-----|-----|
| | 858 | 687 | 653 | 512 | 366 | 356 |

What is this dwindling of the strength from class to class due to? One fifth of every sixth form consists of "supplementary" students. Eliminating this $\frac{1}{5}$ the number of first year pupils in Form VI is 285—exactly $\frac{1}{3}$ of 858. And this in spite of the fact that there is usually a large influx in Form III of pupils from higher elementary school—Note the small fall between Forms II 687 pupils and III 653 pupils.

Do these figures indicate laxity in promotions? How much stricter should we be? How much stricter than he is would a Head dare to be? Is it possible to lay down what percentage should be detained in any class in a properly ordered school system?

To follow further discussion of this question and properly appreciate my arguments and experimental data it is necessary to possess some elementary statistical notions.

Take two sets of measures like those below (A)—they may be the marks scored by two sections of a class.

| A | | B | |
|----|----|----|----|
| 10 | 50 | 86 | 87 |
| 35 | 25 | 68 | 78 |
| 18 | 13 | 50 | 55 |
| 20 | 25 | 41 | 50 |
| 50 | 55 | 35 | 33 |
| 32 | 22 | 32 | 25 |
| 19 | 10 | 20 | 25 |
| 86 | 33 | 19 | 22 |
| 68 | 87 | 18 | 13 |
| 41 | 78 | 10 | 10 |

It is impossible for us to draw any conclusions from them as they are. They can only be compared if they are condensed. The first step to take would be arranging them both in ascending or descending order as in B. This is a little better, for now we can at least say that the best in one is equal to the best in the other and the worst in one is as low as the worst in the other. This step tells us only the range of each set of scores.

But arranging a set of measures in such an array is very difficult when we deal with a large number of measures—say 200 in each group instead of only 10. A further step in condensation is the preparation of what is called a frequency distribution. Below is a specimen of a frequency distribution.

| Class-intervals of scores. | Frequency. |
|-------------------------------|------------|
| 20-24 | 2 |
| 25-29 | 1 |
| 30-34 | 4 |
| 35-39 | 1 |
| 40-44 | 11 |
| 45-49 | 10 |
| 50-54 | 7 |
| 55-59 | 4 |
| 60-64 | 2 |
| 65-69 | 1 |
| Total frequency. | 43 |

This is to be read as follows:—Two boys score between 20 & 24; 11 boys score between 40 and 44 and so on. Strictly the class-interval of 20 to 24 means really 20 to 24.99.

Still more concrete methods of representing facts are required. One of the greatest aids to sound interpretation of statistical data will come from the graphic representation of the data in question. Every teacher is familiar with two of the commonest methods of representing a frequency distribution by a graph: (1) that which gives a frequency polygon, and (2) that which gives a histogram or column diagram. I shall therefore pass on to measures of comparison.

For purposes of comparison we can still further condense these measures and arrive at one single figure which will allow of easy comparison. This single figure gives an idea of the "central tendency". These figures which describe frequency distributions by pointing out central tendencies are called "averages".

The "average" which the teacher knows and constantly uses is the arithmetical mean. The use of the arithmetic mean as a measure of central tendency is attended with one serious defect. The arithmetic mean is affected by the extremes of the distribution that is by unusually large or small measures. Being not so very stable it is not very reliable—particularly when dealing with a small number of measures as in a single class. Consider the table below and you will realise this.

A — 6, 7, 7, 8, 8, 8, 9, 9, 10, 12 Mean = 8.4

B — 5, 6, 7, 8, 8, 8, 9, 9, 11, 13 Mean = 8.4

A' — 1, 7, 7, 8, 8, 8, 9, 9, 10, 12 Mean = 7.9

B' — 5, 6, 7, 8, 8, 8, 9, 9, 11, 20 Mean = 9.1

A more stable average for the teacher dealing with small classes and also one more easily calculated is what is called the median. The median is a pertinent middle value and can be easily found by counting. In the above table for all four sets of measures A, B, A', B', the median is the same viz. 8. The median may therefore be defined as that point on each side of which one half of the number of measures fall.

To be able to compare the status of two distributions by stating their average value is not sufficient. The separate measures of two distributions may spread differently around the average although the averages of the two may be the same. This is seen clearly from the diagram below.

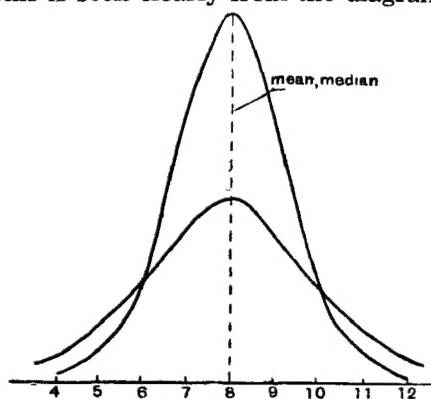


Diagram 1.

In these frequency curves the average value of the two distributions is identical but the spread of the measures is different. One distribution is much more "variable" than the other. In this illustrative case it would be quite incorrect to infer from the identity of the averages of the two classes that the distributions of abilities are equal.

We therefore require a measure which will enable us to compare the variation of ability in the two classes about the average ability of each. We need measures of variability or dispersion which will point out concretely the degree to which the measures vary away from the average. The two easiest measures of variation are (1) Range, (2) Quartile deviation or semi-interquartile range.

(1) *Range*: The range is the difference between the largest and smallest measures—i.e., the difference between the highest mark and lowest mark scored by the class. The range is a very unstable measure as it is entirely dependent on the two measures at the extreme. For instance look at the array of marks in B. In the column on the left the range is 10 to 86. If accidentally the best boy were absent on the day of the examination the range would be 10 to 68.

(2) *Semi-interquartile range*: This diagram explains what it is.

10, 18, 19, 20, 32, 35, 35, 40, 42, 45, 50

Q_1 Median. Q_3

Q_1 and Q_3 are quarter points and the median is the middle point or Q_2 , the second quarter or quartile point. The semi-interquartile range is expressed by $Q = \frac{Q_3 - Q_1}{2}$ that is half the distance between the first and third quarter points.

Owing to its ease of computance and simple meaning it is very useful in presenting facts to the lay reader. In presenting facts for comparison hereafter I shall make use chiefly of the median and the upper and lower quartile points which include between them the solid, stable, middle 50% of measures.

There is also another unit measure of variability called the standard deviation, sigma (σ) that is coming into common use in educational measurement. We need not consider this in detail at present. One of its uses will be apparent a little later.

All the measures of central tendency and variability have been devised solely to organise a complex mass of material in such a way as to facilitate clear educational interpretations as the mind finds it difficult to deal with original ungrouped measures themselves or with whole frequency distributions. The greatest aid to sound interpretation of statistical data to the average teacher can come from graphic representation of facts.

It is obvious that the facts of the frequency distribution can be plotted to yield a frequency curve. If we had a standard pattern to which our curves could be compared interpretation could be possible. Fortunately for us there is such a curve. It is called the normal probability curve.

The normal curve is a symmetrical curve with certain characteristics which will be apparent from the figure below:

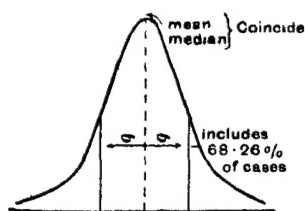


Diagram II.

It can be seen from this figure that between ± 1 S. D. from the mean fall 68.26 per cent of cases. Roughly speaking therefore if the base of the curve were divided into three equal parts the frequency surface would be divided into three parts. The area of these three parts would be 17 per cent, 66 per cent, 17 per cent of the total area included between the frequency curve and the base. Since the number of cases is proportional to the area of the surface, we have 17 per cent, 66 per cent and 17 per cent of the total number in each of the three parts respectively.

The reader who wishes to know more about the normal curve is referred to books mentioned in the foot-note. It is enough to say here that "the Normal frequency surface is Nature's favourite mould." "A random sampling of most facts gives the normal surface. Morality, intelligence, weights and heights of men, blueness of eyes and doubtless the intensity of Halos fit the normal surface."

That measurements of every human trait conform to the Normal curve has been firmly established by wide research. Even the most conservative has accepted the Normal Curve as a standard by which to judge of school marks. Margaret Drummond, Lecturer in Education at the Edinburgh University says in her book, "The Gateways of Learning":—

"Such is our confidence in the existence of our pattern that if, for example, the marks of a thousand unselected children in any examination showed an erratic distribution very different from the normal curve, we should be fully convinced *that there was something wrong either with the examination itself or with the marking of examiners.*" and she might have added also "or with the methods of teaching."

One other cause of a departure from the normal curve should be mentioned. Measurement of an unselected random sample yields the Normal curve. If the group were "selected" for the trait measured we should get what are called skew-curves—the normal curve distorted by selection.

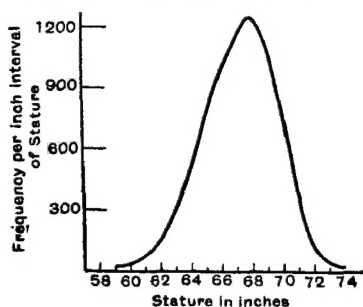


Diagram III.

Look at the curve of the height of a random group. (Diagram III). Now imagine what would have happened if the men in a couple of regiments of the British Army had been measured instead. Since there is a minimum height limit for entrance into the army we would get a curve in which that portion would be absent which represents heights below the minimum height limit.

Since measurements of human traits fit the normal curve, measurements of human intelligence should also fit the normal curve. Extensive testing of intelligence has shown that the normal distribution of intelligence is as below:—

DISTRIBUTION OF INTELLIGENCE IN A NORMAL POPULATION.

| Classification | Intelligence Quotient. | Percentage of all children included. |
|------------------------|------------------------|--------------------------------------|
| Near genius or genius. | Above 140 | 0.25 |
| Very superior. | 120—140 | 6.75 |
| Superior. | 110—120 | 13.00 |
| | | } 20% |
| Normal or average. | 90—110 | 60.00 |
| | | 60% |
| Dull. | 80—90 | 13.00 |
| Borderline. | 70—80 | 6.00 |
| Feeble minded. | Below 70 | 1.00 |
| | | } 20% |

From these figures we see

(1) that the population can be divided into 3 main classes according to intelligence, viz., inferior, average, superior.

(2) that 20% are inferior, 60% average or normal and 20% superior.

The educational progress of a child depends largely upon intelligence provided of course that other considerations are satisfactory.

Our Educational system is divided into three main classes—Elementary Education, Secondary Education and University Education. Elementary Education is so devised and its curriculum so framed as to suit the masses. Excepting the feeble-minded the rest of the population has sufficient intelligence to benefit by a course of Elementary Education. Since the feeble-minded form only 1 per cent we may conclude that at least 98 or 99% of the population should profit from a course of Elementary Education.

Since both the quantity and difficulty of the subjects of the Secondary school course are much greater, the percentage of the population with sufficient intelligence to profit from a Secondary course will be smaller. We can safely say that, eliminating the 20% of people of inferior intelligence the rest, viz., 80%, consisting of people of average and superior intelligence should be capable of profiting by a course of secondary education. If this percentage fail to profit from the course, then we must conclude that there is something seriously wrong somewhere. A scientific attack should give us some evidence of what is wrong.

(1) Statistical Methods applied to Education—H. O. Rugg.

(2) Practical statistics for Teachers.

VILLAGE SCHOOLS: THEIR DIFFICULTIES

Suggestions for their Betterment

BY

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Any scheme for rural uplift must reckon with the village school as the most potent force for its successful fruition. It should be carefully borne in mind that the all-round improvement of the villages could never come from without but should spring from forces inherent in the villagers themselves. The will to go forward, to progress and keep abreast of the times is ultimately the reliable and effective agency for any real advance; and in creating this will to reform and progress, the school plays the most important part. Education should always be planned to suit the needs of life. It must help men to equip themselves for some useful work, congenial to the individual and of service to the community. The villagers are pre-eminently an agricultural folk; and the aim of the rural school should be to help the village children to educate themselves as far as possible on modern lines for the pursuit of an agricultural career, and for the intelligent discharge of the ordinary duties of the present-day citizenship.

The schools in the villages to-day are a lifeless, featureless, and futile imitation of the schools in town areas. This is basically wrong. The urban pupils in almost every case prepare themselves for different learned professions which necessarily insist on a certain level of cultural equipment. They have the requisite funds, aptitude, and leisure to prosecute their studies to their utmost capacities. But the conditions obtaining in the villages are quite different; in fact there is nothing in common between the rural and urban children in any matter of educational importance. Therefore, the present method of equipping and administering the village schools on the same plan as those of the town areas is not at all conducive to the spread of literacy or the promotion of social welfare among the rural folk. It is therefore necessary to investigate into the difficulties and handicaps under which the village schools are working to-day; and the present moment seems to be most opportune for such an analysis; because the Taluk Boards which have been in charge of village education have now been abolished in our Province; and it is hoped that the grievances and miseries of the rural schools would be matters of the past, and that the more enlightened District Board Authorities would approach the problem of village education with a will to effect a thorough reform and an iron determination to achieve its purpose. If the village schools had not fulfilled the aim of the Government, namely, the eradication of illiteracy in the country, and if the percentage of the literates in rural areas is appallingly low, it is because the academic as well as the administrative sides of the management of these schools have not been functioning on a sound and correct basis. The educational policy of the Taluk Boards was not characterised by any vigour, initiative, courage or imagination. Petty tyrannies in the shape of meaningless and frequent transfers owing to nepotism or animosity, ridiculously low salaries and inexcusable cuts in them, non-payment of even the paltry pittance of this salary for months together—are

these conditions likely to enthuse the teachers to discharge their duties with zeal and earnestness? It is therefore the primary duty of the District Boards to put an end to the existing depressing and deadening factors, and usher in an era of energetic reform and a liberal policy to improve the conditions of schools and the status of teachers.

It is a melancholy fact that in the Board Schools where education is free (but not compulsory), it is difficult, nay impossible, to enforce regular attendance on the part of the boys. A school may be in existence in a village for 20 or 30 years; and yet the number of those who could read and write in it may be counted on the fingers of one's hands. The reason is that though you have on the rolls a hundred students, the number of those that actually attend regularly from day to day for at least five years in order to gain a decent measure of permanent literacy will not be more than ten. Of course the parents are to blame here. Even when the boy is in the class-room, not infrequently does the father come to the school to take him away to help in watering the fields, or grazing the cattle, or keeping the baby at home as the mother is needed for harvesting or transplanting. When the boys could be made to help in the agricultural work and save the expenses of a cooly, or themselves earn a couple of annas or so, why bother about schools the advantages of which are doubtful and certainly not immediate and concrete!

THE CRYING NEEDS

Added to this indifference and apathy and sometimes the active opposition of the village parent, there is another handicap to the successful working of the schools; and that is the frequent transfers of the teachers. If the personal influence of the teacher is to be felt in the school and in the village, he must be not only a permanent resident in it, but also be as far as possible similar in tastes, sympathies, religion and caste of the village community. He has in the first instance to educate the parents themselves, and make them realise the necessity and the advantages of literacy. If he happens to be a stranger, he would certainly fail in this task. The foundation for rural reconstruction could be said to be well and firmly laid only when the teacher has effected a rapport with the parents in the village. It is essential for the New Management to note this fact, and avoid the ugly feature of the Taluk Board administration in the matter of unreasonable and needless frequency of transfers.

Another defect in the working of the country schools is the woeful lack of equipment, appliances, library and text-books. Of course, the boys have no books; they cannot afford them, nor do the parents feel their necessity. But what about the teachers? They are not supplied any of these things by the authorities. To maintain a library to suit the requirements of the village life and adding to it periodically is the most urgent need that should be looked into by the authorities. To grudge to meet this legitimate expenditure and to apply the retrenchment in this matter betrays a lamentable lack of educational vision, and contributes not a little to the ultimate waste of money, time and energy in education. The authorities should recognise that the teacher holds a key position in the life of the village community. He is regarded as the professional "man of knowledge"; and on him depends whether the boys at present in his charge are to be equipped in knowledge, intelligence and character to meet the tasks of adult life. For the fulfilment of this noble mission, he must be intellectually alert and guard himself against getting into a

groove. There is scarcely any intellectual stimulus for the village schoolmaster, and his routine work is apt to degenerate into dead drudgery. A teacher in a city has an intellectual atmosphere; and it is easy for him to be in intimate personal contact with the moral, social, economic and national problems of the day. But it is desperately difficult for the rural teacher to be alert intellectually; and it is sheer madness to expect any good to come out of his work in the school unless he is substantially helped by the grant of a tolerably good library, and a few magazines and newspapers. A decent library and a good supply of journal is the least that the authorities are expected to do to spread light and learning in the dark and dreary places where live the nine-tenths of India's population.

PRACTICAL PROPOSALS.

Again every effort should be made to persuade the boys to stay in the school till they have mastered the three R's. That is to say, at least five years of regular attendance which is indispensable to make him literate should be made obligatory on the part of every boy. Of course, it is impossible to realise this ideal unless the Government makes elementary education *compulsory*; but till that happy measure becomes an accomplished fact, the school should be made as attractive as possible; and all sorts of persuasions and motives should be used to work on the parents and boys to bring home to their minds the moral duty of being educated and the social necessity of being literate. A good play-ground, spectacular display of sports, games and drill, maintenance of an attractive flower and vegetable garden, gramophone music at stated hours, and training the boys in collective singing and to put on boards popular dramas—all these are very useful and powerful accessories to instil in the minds of the villagers the beauty and utility of knowledge. The School authorities should encourage in every possible way the teachers by ungrudging grants and helpful advice to make themselves useful to the country folk, and thus create in them unconsciously a spirit of sympathy, goodwill, and co-operation towards the school.

What the villagers need first and foremost is a working knowledge of the local vernacular to read and write, and a good grounding in arithmetic to enable them to keep accounts. The villager should be able to read the newspapers and follow the world events intelligently, and be in a position to develop a culture of his own by a study of our ancient epics and puranas. But more fundamental than these is the teaching of personal hygiene and elementary principles of sanitation. Go to any village school at any time, and you will find the stink in the class-room, the dirty and nasty dress of the boys and their unclean and uncouth habits literally nauseating; and you must consider yourself lucky if you have the strength of will to inhibit the vomiting reflex! It is therefore imperative that hygiene and sanitation to suit the conditions of the village should be taught, and the boys trained to put them into practice in their every-day life. Of course, in the final stage, that is, in the fourth and fifth years, stories from our epics and history, geography of the village, district and province emphasising the agricultural and industrial aspects, and practical civics may be taught correlating these as far as possible with the actual and living conditions of the village. To realise these aims the rural school has to be remade fundamentally. It should be well endowed and powerfully entrenched in the social organisation of the people. Money spent on education is really money invested even if we have to wait for a generation or two for the dividend. All advanced nations in the West have come to feel that the first claim on public revenue is education. Public expenditure in

England on education in 1833 amounted to less than £ 20,000; in 1933 it is more than a hundred million pounds sterling. A sobering intensity of purpose and a profound sense of moral responsibility on the part of the Government and the educational leaders would succeed in making the school not only a veritable centre of knowledge and culture but a mighty civilising and socialising force in the village.

One very heart-rending and distressing fact has to be pointed out regarding the rural schools: as a good percentage of these boys cannot afford a mid-day meal or tiffin, they come to the school taking a cup or two of ragi-pudding in the morning; and they cannot have anything at home till late in the evening. What lessons could be received and what knowledge could be built up in the minds of these little boys on an empty stomach and a languishing body? The administrative authorities and philanthropic persons have here a most fertile field for the exercise of their humanitarian impulses. If the schools could organise a free supply of tiffin at noon to these poor boys it would be a great blessing to them, and would certainly act as an additional attraction for the spread of education. It is hoped that the agencies working for the promotion of rural welfare will devote some thought to these miserable aspects of the existing state village schools, and devise ways and means to root out these stumbling blocks to the spread of literacy among the village folk. It is ignorance that makes beasts of men; and let us not forget that the government, like water, can never rise higher than its source. Therefore in order to safeguard the national advance and to insure its continued prosperity attention should be concentrated on the improvement of the villages in every respect.

PROGRESS OF EDUCATION IN INDIA—1927-1932.

*A Summary of the 10th Quinquennial Report continued from
page 288 of Vol. VII, No. 6*

PRIMARY EDUCATION (BOYS).

An increase of only 6,169 primary schools in the whole of British India, as contrasted with one of 25,229 in the previous quinquennium and with one of 13,356 in the quinquennium of 1917-1922, indicates the quantitative set-back caused by financial depression; a more detailed examination of the figures, however, shows that in many provinces the primary system has been placed on a more effective and economical foundation than obtained five years ago.

AVERAGE ENROLMENT OF PRIMARY SCHOOLS (FOR BOYS.)

The average enrolment in 1932 was higher than in previous quinquennia. It should also be borne in mind that new primary schools are usually located in small villages where a high enrolment cannot be expected. Still, after making all possible allowances, the figures are disappointing. Unless enrolment is materially enhanced, there is little prospect of an effective system of primary education in India. Low enrolment shows that large numbers of boys do not take advantage of existing facilities; it also follows that a very large proportion of primary schools are single-teacher institutions.

Greater attention is now being paid to improving average attendance. Where compulsory education has been introduced and properly applied, an almost immediate result has been an improvement in attendance together with a corresponding increase in the effectiveness of the schooling.

In boys' primary schools in British India, the percentage of average attendance to the total number of pupils enrolled in schools has increased to 79.1 in 1932 from 77.8 in 1927 and from 76.1. in 1922. This increase may appear small at first sight, but it is being steadily maintained; in view of the difficulties peculiar to the last quinquennium, it is at least indicative of improvement.

If the primary system of education is to escape the alarming wastage which still disfigures its development, far more attention should be paid to the proper distribution of schools, to the avoidance of multiplying schools without reference to their efficiency and effectiveness, to the enrolment of pupils at the proper time and season, to more regular attendance. In addition, provincial Governments should possess an agency, adequate in number and armed with sufficient authority, to ensure that financial resources are spent both wisely and effectively. This is the very essence of a responsible system of government. The most effective means of improvement, however, lies in an adequate supply of well-trained and well-qualified teachers.

Compulsion. The accounts indicate that the high hopes entertained five years ago have not been fulfilled. It was then suggested that "it was only a question of money" and that with additional funds compulsion would become a panacea of all our ills. But more money has not been forthcoming;

and grave difficulties in working even limited schemes have been encountered. It is doubtful whether large additional sums should be spent on compulsion in many provinces. A careful preparation of the ground is essential.

Lamentation over the shortage of funds is out-of-place; what is required is a firm determination to grapple with the difficulties.

The acid test of the value of compulsion is the extent in which it is successful in reducing waste caused by stagnation or 'wastage' or both.

There is no cause for undue pessimism, provided that earnest efforts are being made to prepare the way for compulsion. As efficiency of teaching is improved, so will the prospects of compulsion, become brighter. The essential preliminary is the establishment of a series of efficient five-class schools, staffed by well-trained products of vernacular middle schools. A well-devised distribution of schools is also essential; compulsion cannot be based on ephemeral schools without continuity or tradition. A village school under compulsion should become a village institution.

THE EDUCATION OF GIRLS AND WOMEN.

INCREASING INTEREST; INADEQUATE SUPPORT.

The provincial reports give hopeful indications that the difficulties arising from apathy and from the persistence of social customs are tending to disappear; it is particularly pleasing that this hopeful tendency is reported even from provinces, in which the forces of reaction have hitherto been firmly entrenched.

Enrolment statistics also afford justification for this spirit of optimism. Whereas in the previous quinquennium an increase of 417,930 in the number of girls at school compared unfavourably with the large increase of 2,352,216 in the number of boys at school, the number of girls at school increased during quinquennium under review by as many as 650,297 as against 958,744 additional boys at school.

Madras, which has long been a pioneer in girls' education, has shown further progress. The enrolment of girls in all types of institutions advanced during the quinquennium from 539,351 to 745,536, or an increase of 203,185 as against an increase of 198,509 in the number of boys; thus, at long last, progress among girls has become more rapid than among boys.

The expenditure figures indicate that increased financial support has not been forthcoming. The main reason why the necessary financial support has not been forthcoming has been the inability of provincial governments to maintain the increased measure of financial support, which had been given in the previous quinquennium.

The position is therefore critical. The quantitative advance in the enrolment of girls will at least be maintained; it will probably be expedited. Unless, therefore, more generous financial support is given the grave defects in the education of boys will be accentuated in the education of girls.

CO-EDUCATION.

The general attitude towards co-education has changed very considerably during the quinquennium, probably as a result of financial string-

ency. The alternative no longer lies between co-education and separate girls' schools, but rather between co-education and no school provision whatever.

The present position and the future prospects of girls' primary education are therefore perplexing. The demand among Indian girls for education will increase very rapidly, but from the continuance of the financial stringency it is difficult to suggest how that demand can be met, especially in sparsely populated areas. The creation of separate primary schools for girls is prohibited on financial grounds and the only alternative would appear to be a wide expansion of co-educational school, but co-education must be confined almost entirely to the pupils and not to the staff, except possibly in Burma. Save in very rare cases, principally where the wife of a village schoolmaster has become a trained teacher, the appointment of a mixed staff in primary school is impracticable; but in provinces such as Madras, Bengal and Bihar where the employment of men teachers in girls' schools is so prevalent, the girls would not be placed so unfavourably in co-educational schools as they are in many of the separate schools for girls. It is for consideration whether co-education could not be established better on the foundation of girls' than of boys' primary schools. Women, provided they are well-qualified and trained, are usually better teachers for small boys than men. Little boys might therefore be encouraged to attend girls' primary schools in places where teaching is in efficient hands.

Madras and Bombay are far more advanced than other provinces. Indeed, the enrolment of girls in classes IV and V in Madras is greater than that of all other provinces taken together, excluding Bombay. The very considerable drop in Madras between the enrolment of class IV and class V provokes the fear that girls are reluctant to prolong their stay at school in a system of co-education, in which there are few women teachers.

All provincial reports are agreed that future progress depends very largely upon the employment of a far greater number of well-trained and suitably qualified school mistresses in village schools. Laudable efforts were made in the previous quinquennium to improve the size and the quality of vernacular training institutions for girls; but these welcome improvements, even if they are maintained, will not by themselves remove the root difficulty. It is far from easy to make suitable arrangements for the living accommodation of women teachers in villages. In consequence, many girls, who have successfully completed their period of training are reluctant, not unnaturally, to accept service in remote villages, far from their family surroundings and by no means immune from risks and dangers. It is mainly because they often possess the means of coping these difficulties that mission institutions compare favourably with those maintained by local bodies.

The most effective solution of this difficulty would appear to lie in attaching small training classes to some of the better and stronger schools situated in rural areas. By this means promising girls from the locality can be trained; and less difficulty would be experienced in providing for their accommodation in the villages in which they will teach than would be the case of those coming from a distance.

SECONDARY AND HIGHER EDUCATION.

In 1932, out of the 270,026 girls in secondary school, 70,613 were in the middle stage and only 14,581 were in the high stage. Of the total number

in the high stage, 6752 were Hindus, 3,261 Indian Christians, 1278 Parsees and 594 Muhammadans.

The number of secondary schools for girls and their enrolment in Madras have not materially altered during the quinquennium, but the number of girls reading in boys' secondary schools (excluding European schools) has advanced from 2765 to 4774 during the quinquennium.

The number of arts colleges for women in British India in 1932 was 20. Of the 2,966 women attending college in 1932, 1595 were Hindus, 726 were Indian Christians, 197 were Parsees and 105 were Muhammadans.

The demand for college education is rapidly increasing, and many girl students acquit themselves with great credit in university examinations. The Commission on Christian Higher education in India observed that women's colleges "have escaped many of the difficulties which confront men's colleges." The comparatively small numbers have been a great advantage to women's colleges and have enabled them to pay individual attention to students. The small hostel units have also been a great asset in fostering residential life of the right kind.

During the next quinquennium, it is probable that applications for admission to women's colleges will increase even more rapidly than in the recent past. How will this demand be met? Some relief will be afforded by the admission of girl students to men's colleges, especially in Burma and Bombay. Special provision and accommodation for girls should be made and well-qualified women should be appointed to the staffs of these colleges, whose special function will be to supervise the needs of the girls. But even with this respite, the burden on the women's colleges will still be very great. The serious shortcomings of the large men's colleges should be avoided at all costs. New colleges should therefore be opened, in order that existing colleges should not be overburdened by excessive enrolment.

PROFESSIONAL EDUCATION.

The general impression is conveyed by provincial reports that, inspite of the large reduction in the total enrolment, the numbers in many law colleges are still excessive in relation to the accommodation and to the probable absorption of students into the legal profession. This condition has a two-fold evil effects. It promotes litigiousness, by acute competition among the less competent practitioners, it tends—except in the highest range—strongly to undermine the technical, civic and ethical standards of the profession.

The brief summary of the activities of professional colleges and departments indicates that many institutions are admirably equipped and accommodated. The question arises whether recent retrenchments, especially in the matter of staff, have been wisely conceived. It is scarcely an economy to maintain these institutions whose buildings and equipment have been provided by an expenditure of large sums of money, unless the qualifications and experience of the staffs are such as to maintain a high standard of teaching.

Many institutions are suffering acutely from the present economic depression, and students often find it as difficult as arts students to obtain suitable employment. A multiplication of institutions of these types, therefore,

will not provide means for relieving middle-class unemployment, as is often suggested.

VOCATIONAL TRAINING

Progress is being made by schools of varying types, especially by the craft schools, but the numbers of institutions and pupils are still insignificant in comparison with those of ordinary schools. This marked disparity has evoked much adverse comment ; there is a widespread desire that early steps should be taken to rectify this disproportion.

It is open to question whether training for a few hours a week in such subjects, interspersed between long hours of study in general subjects, would be of value. There is also a danger, which in the light of past experience is by no means imaginary, that these subjects might be regarded as " soft options " by those who aspire to enter college and would therefore be handicapped in their college careers. The very object of these innovations might also be defeated. Boys, whose bent does not lie in literary studies might be induced to prolong unduly their literary education by the temptation that a small portion of their time would be spent in vocational training.

The better course would be to provide a larger number of vocational institutions, technical, craft or industrial, in which the pupils could devote their whole time and energy to practical pursuits, freed from the temptation of hankering after a literary career.

The question arises as to when the time for such bifurcation or diversion should be fixed. The actual time would vary in accordance with the attainments and ambitions of the boys. The diversion of the humblest class, those who would furnish mistries, etc., would be on the completion of the primary stage ; or better educated boys, who would be absorbed in industries, would be at a stage somewhat earlier than the present matriculation while those who sought admission to the better-type of technical schools would continue longer in their general studies.

EDUCATION OF MUSLIMS.

The figures are generally satisfactory from the quantitative point of view. An increase of 854,667 Muslim students in 1922-27 quinquennium coupled with one of 587,649 in the 1927-32 quinquennium, or an increase of 1,442,316 in a decade, indicates the rapidity with which the school enrolment of Muslims is increasing. Whereas in 1932 the Muslim population formed 24.7 per cent of the total population in British India, Muslim pupils formed 26.7 per cent. of the total number of pupils enrolled from all communities.

A closer examination of the figures, however, will disclose disquieting features. The vast majority of Muslim boys do not proceed further than the primary stage. In 1932 Muslims formed 30.5 per cent. of the total in class I ; in class II they formed only 25.3 per cent. ; in class V only 19.4 per cent. In the middle stage there were only 165,144 pupils or 18.2 per cent. of the total ; In colleges and universities there were only 13,302 students or 13.6 per cent. of the total.

The position of Muslim girls is even more disturbing. In 1932 there were 647,713 Muslim girls at school and college or 26.0 per cent. of the total. In

class I they formed 28.6 per cent. of the total, but in class V only 9.87 per cent. of the total. There were only 4,591 or 6.5 per cent. in the middle stage ; and 594 or 4.1 per cent. in the high stage. There were only 127 Muslim girls in all colleges and universities.

The Hartog Committee recorded the opinion that separate institutions have "undoubtedly brought Muslim pupils under instruction more extensively and more quickly than would have been the case had the only facilities been those afforded by the undenominational and publicly managed schools. But these institutions have done but little to raise the general standard of education among the Muslims to that of other communities. A continuance of these institutions on a large scale will be prejudicial both to the interests of Muslims themselves and to the public interest."

In order to encourage more Muslims into the ordinary schools the Committee suggested that efforts should be made to provide opportunities for religious instruction, to employ a larger number of Muslim teachers and to reserve a certain number of places for Muslim pupils. Though these suggestions bristle with difficulties, little seems to have been done in these directions. So long as segregate 'special' schools continue in such large numbers, the progress of Muslims must continue to be seriously retarded.

EDUCATION OF THE DEPRESSED CLASSES.

Considerable success has been achieved in encouraging these people to send their children to the ordinary schools. Indeed, the improved position of depressed classes in the ordinary schools is one of the most pleasing features of the quinquennium.

The policy of Madras has been "to get the pupils of these communities admitted into existing elementary schools. In places where depressed class pupils are denied admission or have no access to existing schools and in those places where there are no educational facilities separate schools are started. . . . Deserving students of these classes have been helped by the grant of scholarships, boarding grants and stipends."

In Bombay, a committee which had been appointed to enquire into the condition of the depressed classes made the following recommendations in 1930 :—

(a) Reaffirmation of the Government policy that there should be equality of treatment of all classes of children in publicly managed institutions ;

(b) Encouragement of common schools as opposed to segregate schools for depressed classes ;

(c) More frequent interchange of teachers in common and separate schools.

(d) Abandonment of the titles 'depressed classes' and 'low caste schools.'

(e) Institution of additional scholarships and relaxation of age-limits in certain conditions ;

(f) Increasing the number of teachers belonging to backward classes in primary classes.

SOME BOOKS OF SINCLAIR

BY

MR. R. V. SREENIVASAN, M.A.

The one outstanding figure that literary America has produced is undoubtedly Mr. Upton Sinclair. His energy is colossal and in a period of about thirty years he has turned some fifty odd volumes, the majority of which exceed 300 pages each and often run to double that figure. His intellect can easily be compared to that of G. B. Shaw, and his imagination closely rivals that of H. G. Wells. No subject has escaped his pen, and there is no known form of literary writing that he has not attempted. From pot-boilers to poetry his pen has traversed, thus covering the whole range of imaginative fiction.

To a world that has been regarding modern industrial America as a new portent in an old world, he is bound to appear as its most emotional and rational exponent. The realistic images and the intellectual interpretations that he gives of the most characteristic contemporary aspects of American life entitle him to that eminence and esteem that the world has given to Cooper and Twain for their significant interpretation of their own epochs of American life. They endear him to the world and America alike as "the Soul of America."

A striking feature of his works is the autobiographical element. In fact Sinclair seems to have taken little pains to hide this truth from the eyes of even the casual reader. Rarely do we find in literature or even in history that the life of one single individual is so full, so rich, and so abundant of experiences that could be easily transformed into readable and lasting literature. It is so unbelievably unique in the case of Sinclair that people are apt to doubt the authenticity of some of his facts. But when we remember that America has not challenged the veracity of his allegations, this doubt must at once disappear. His information is unchallengeable and his material is real and true.

But his works are more than mere history and less than mere fiction. His characters, often replicas of his own self, live because they are not merely the creations of an imaginative artist, but are the polished reproductions of living specimens, prototypes of which could be easily found in any country. They portray life, rendered rich and instructive by the subtle touches of a pastmaster in the art of propaganda. The one supreme purpose that underlies all his efforts is Socialist propaganda. To miss this point is to miss the soul of Sinclair.

"The Jungle" was the first work that brought him world fame. It deals with the struggles of a group of immigrant workers in one of the meat-packing industries of Chicago; particularly with the sublimely human aspirations of Jurgis and Ona who want to get on in life, have a happy home and children of their own; a supremely felicitous and domestic dream that is ruthlessly shattered by the brutal unscrupulousness of a money-grabbing, dollar-worshipping industry which feeds its workers on the filth and stench of its stockyards, and

fattens itself upon their ignorance and helplessness. It opens with a beautiful description of a wedding party and ends with the hero coming out of prison to find his home and family gone which turns him into a rebel of the Socialist camp.

The book was acclaimed in one breath as a great work by the whole of America, and the world has translated it into seventeen languages. No greater tribute can be paid to a book, and Jack London, another of America's great writers, called it "the Uncle Tom's Cabin of Wage-Slavery." It was so true, so tragic and so human, and yet so eloquent and exact that even the President was forced to sit and take notice of the book. A Committee of Enquiry was instituted to examine the truth of the bold allegations that the young Socialist writer made in this book. One unexpected result of this was that it earned for Sinclair the name of "Muck-raker" which was how American orthodoxy condemned one of her most enlightened and unselfish sons. The name stuck on to him for twenty years, and it made him, if anything, more determined to expose greater scandals in American High Society and Big Business.

A series of Pamphlets was the result. The "Metropolis" is an attack on New York Society of which he caught a glimpse as the famous author of "The Jungle." "The Money-changers" gives an "inside-story" of the panic of 1907 and constitutes a scathing criticism of Wall Street and its ways. "The Brass-check" paints an intimate picture of American journalism as it was then, and the evil influences that it exerted on the public and the foul ways by which it placated opinion. Then followed "The Goose-step" and "The Goslings," twin studies of American Educational system, which constitute a vigorous attack on the misguided policy of these institutions and the wastage of youth and teaching talent that this policy entailed. Again "The Profits of Religion" takes up the churches which serve merely as so many platforms from which capitalistic propaganda of a pernicious type is carried on. All these pamphlets reveal a power of expression and a courage of conviction that are complete and effective.

The greatest of his pamphlets is "Mammon Art: an Essay in Economic Interpretation." Considered broadly it is an attack on the Art for Art's sake Theory, and exposes what he calls the Seven lies of Art. The thesis advanced is that all art is propaganda of one kind or another since art is bound to give one view or other of life. "Great art is produced when propaganda of vitality and importance is put across with technical competence." It is this position of his that he seeks to fortify with a review of literature from Greek to modern times against their political and social background. He proves that literature reflects either contemporary, and therefore correct, ideas, in which case it is senile, or reformatory, and therefore rebellious, ideas, in which case it is great. He points out that Aristophanes, Virgil, Juvenal, Shakespeare, Milton, and Shelley are great because they have been either political or social rebels, and that the "bulk of the successful artists of any time are men in harmony with the spirit of that time and identified with the powers prevailing," which means that success and greatness are not synonyms. Truly great artists have never been darlings of contemporary society: They have been rebels and have always dined later. This is of course revolutionary criticism, the first fore-runner of which was G. B. Shaw. It is sane and original, and how so can be found only by a perusal of the book which is rendered very readable by a steady vein of bantering humour which runs throughout the treatise, enlivening it.

Carrying all the power and force of these pamphlets within its simple story is "Oil," another of Sinclair's novels. This book, while restoring the pure novelist in Sinclair to us, also reveals the power of his brush to paint a composite picture of the various aspects of American life that he has so far been criticising. This story is woven round the son of an oil magnate of America who conceives a deep affection for Paul, a young workingman, and thus catches a first glimpse into the rebel world of Socialism that lies beneath the happy paradise of capitalism. It tells of Oil magnates and their families, of oil wells and how they are sunk and pumped, of oil workers, strikes and strike-breakers, of oil deals, combines and scandals. In between are thrown intimate descriptions of the University education that these aristocrats get; their betting parties; of Hollywood stars and their frivolous life; of churches and their boosting; of Socialistic organs and their suppression. The whole panorama of American life is stretched before our eyes, and the result is a convincing picture of a magnitude and effect that have never been achieved before.

While "Oil!" and "The Jungle!" give pictures of the capitalist and working classes, "The Wet Parade" presents a different canvas. Its special interest lies in its theme, Prohibition. Kip Tarleton and Maggie May come of two differently placed families, the common link being that both are teetotallers. They love each other, but a delicate sense of social inferiority prevents Kip from proposing to her until she is herself forced to own her love for him. They both determine to combat the demon, drink. Their trials, Kip's experiences in the Federal Prohibition Service, his tragic death and Maggie May's resolve to carry on the work through Prohibition lectures form interesting and enlightening reading. At the end is a stirring appeal to the American people and Government to try Prohibition sincerely before condemning it. The evils of drink and the tragedies that are enacted as a result are the subjects of some very poignant scenes. Sinclair's own father was a drunkard and Sinclair knew what he was portraying when he wrote this book.

"The Journal of Arthur Stirling" reveals another type of technique. It is in the form of a diary kept by a struggling and penniless writer of poems. It is a record of emotions, often over-wrought, incoherent and hysterical, but always sincere. It reveals a highly sensitive heart, in great agony of soul, beating its wings against the stupid conventions and the criminal indifference of society and its myrmidons, the publishers and reviewers, who insist that the man of genius should go into the open market and chaffer for his bread and be put to the same indignities and shames that an ordinary lout or idler is subjected to. It is indeed "an oasis in a desert of clever imitations."

This book was first presented to the world as a genuine document, obituary notices having been printed in the papers to support the legend of Arthur Stirling's suicide as a result of his failure to get his epic poem published. But readers were able to see through this trick since Sinclair had not refrained from referring to his own experiences as an author, and publishers and reviewers whom he had approached before, quickly recognized themselves in the book. So Sinclair had to own his authorship, which he did through an article in "The Independent" entitled "My Cause." His cause was that of the impecunious poet whom he wanted to subsidize through a public fund intended to endow young writers of merit. But there was one flaw in this scheme that escaped his attention then, but which he acknowledged later on. His mistake was in supposing that literature made life and not life literature. Also he failed to note that art like schools and churches, would be emasculated.

lated, and that after all the poor man of genius was one among a fraternity of millions who silently suffered and endured the cruel buffets of those in control of the wealth of the world. Thus at last the Socialist in Sinclair !

Another book that is very autobiographical is "Love's Pilgrimage." It gives the story of his own early life. It begins with Thyrsis's attempts to be celibate when everything prompts him to take a sip at the forbidden fount of sex. Only an over-mastering ambition to bloom into an author gives him the will power to suppress his natural cravings. In a moment of weakness he decides to take a spiritual partner, Corydon. This only leads on to an inevitable entanglement into the inseparable net that Nature weaves. They fall in love, and a marriage of minds deteriorates or rather develops into a marriage of hearts. Soon a child is born to them and from that moment onwards every step that they take is fraught with danger. Too late they discover that they are not properly mated, and a not too-daring clergyman comes between them only to fly precipitately at the first signs of an amicable settlement. The book abruptly ends with a compact between Thyrsis and Corydon to face problems boldly. The explanation for this sudden ending is to be sought in events in the actual life of the author which culminated in the elopement of his own wife with another. A sequel was promised but never materialised owing to obvious reasons.

The great charm of this book lies in its outspoken candour and its magnificent shamelessness. At a time when to whisper the word "sex" was to be condemned as vulgar, this book dared to speak of wooing, marriage, pregnancy and birth in frank and classic lines. Of course Zola has given a description of child birth, but Sinclair's is decidedly more human and more poetic. If only for that one scene, the book is an unforgettable epic. It is certainly his greatest work, and one of the imperishable books of the world.

The "Book of Life" is a work of a kind that H. G. Wells is famous for. Its purpose is to guide the average man through his daily routine of work and conduct in life. Here Mr. Sinclair allows his vast reading and critical intellect to play upon the inexhaustible theme of Man, and succeeds in throwing some valuable light upon some of the scarcely understood, sometimes even entirely unsuspected aspects of Man's beliefs and activities. Herein are no dogmas or doctrines, no absolutes and ultimates. It is all an impassioned effort at a sane and rational discussion of every subject from politics to promiscuity and from theology to therapeutics.

The first part deals with the Mind of Man. It delves into the mysteries of the subconscious and the occult ; unravelling their magic splendour and spreading them before our eyes. It speaks of psychism and psychology in a way that text-books have failed to do, and achieves the almost impossible task of convincing us of their growing importance to humanity.

The second part deals with the Body of Man. It begins with a minute description of the human physiognomy and dilates upon the importance of keeping every part of it fit. It stresses the value of exercise, fresh air and general cleanliness. Then it proceeds to give a study of dietetics and the efficacy of the fast cure. It ends with the caution that the human body is an organic whole and has to be treated as such and not in parts.

The Book of Love of course makes the one error of supposing that the experience of one man can constitute a guide for all. In matters of the heart,

it is impossible to lay down rules of conduct, and Sinclair's plea for a course of lessons in love and marriage is sure to fall on deaf ears. His view of the subject proceeds from the presumption that economic dependence is what ultimately affects and explains the relation of man to woman. This "exploitation complex" springs up at every step and spoils the otherwise good advice that he has to offer to young and inexperienced couples. Still as guides go, he is not so very bad or intolerable. "Be natural; be simple and straightforward; and beware of false notions about sex" is a good epitome of what he has to say on the subject. On the whole he has succeeded in pointing out an exceptionally sane and healthy path to life's young adventurers.

The Book of Society which forms the fourth and last part, is an attack against capitalist society and sums up what he has to say on social reconstruction. Of course Russia is the polestar, but minus the frightful orgies of bloodshed and violence that the Red Revolution involved. He believes that a peaceful reconstruction on a socialistic lines is possible though remote.

It is but fitting that "The Way Out" and "I, Governor of California" should be taken up here. Both are written with a view to suggest solutions to the immediate problems facing America. The way out is sought through a national buying up of Industries, the actual burden of which is to be lessened by a monetary policy of slight inflation, and through transferring control to the workers. The reward of initiative and intellect is to be in the public recognition of them through the trust that the public will place in their policy and government. Education of a new kind and towards this object is the ultimate panacea, and success on these lines is not beyond hope. "I, Governor of California" is simply an elaboration of this plan with particular relation to "Ending Poverty in California." It gives in detail what he will do and how he will proceed towards the goal.

Such, in brief, are the nature and range of his works. They reveal a master mind, capable of conceiving great tasks and executing them with the least sacrifice of details for the sake of form or finish.

TTT-BITS FROM THE EDUCATIONAL WORLD

BY

ANGLER.

THE NEW S. S. L. C. SCHEME.

The G.O. dated 6—7—1934 of the Government of Madras on the new S. S. L. C. scheme has at last been published, with a view to set at rest the discussions on changes required in Secondary education in our province. But it remains to be seen whether the 1934 scheme will not be interfered with in the near future. The question does present itself, "Is the present the best course that can be devised?" With this, other questions which are of perennial interest do present themselves. Is the course of study the proper course for the University? Is it the best for preparation for citizenship? Is it the best for preparation for life? Does this revision give the teacher and schools freedom to educate the boys and girls of the country to be efficient? Is the content of the 1934 scheme of Secondary education devised from first principles? Until we answer these satisfactorily and revise our ideas of Secondary education, the 1934 scheme will not work, especially when schools are "dull" as they are. Let Dr. Norwood speak of what a dull school is. "A dull school is one in which masters and boys feel themselves to be primarily engaged in completing an unusual round of routine which is imposed upon them from outside, and which will be externally judged by such results as admit of measurement, the judges being too often those who have no direct knowledge of the conditions or of the pupils of the schools." Secondary education can never be what it ought to be unless it is conceived as a *moral* rather than an *intellectual* task.

DEEPENING CRISIS IN SERVICE CONDITIONS.

While the S. I. T. U. is trying to organise teaching opinion on the problems of Teachers' Service conditions through its Bill, the gap is widening between educational employers and employees. It is time these problems entered the conception of school and college authorities, the Department, and the Ministry of Education in Madras, and it is urgent that all concerned in the nation's capital, in terms of youth and the teaching wealth, bore in mind the conceptions of the S. I. T. U. Bill on Teachers' Service conditions. It is time the Government realised that the teaching profession has its uses and cannot submit to the deepening crisis in their profession. Teachers are suffering reductions in their already low salaries and in staffing. They are being victimised unceremoniously in the honest pursuit of the career they have chosen, by unreasonable terminations and their work is becoming trying in every way. The latest instance comes from Bodinayakanur where some teachers are alleged to have been thrown out into the street by the correspondent of an aided school for failure to produce good school averages in the subjects taught by the teachers concerned. This is the first fruit of the new school year 1934-35; This correspondent, I am told is a member of the Legislative Council.

EFFICIENCY IN SCHOOLS.

The June S. I. T. raises editotrially the question of efficiency in terms of the eligibility list. The eligibility list is to-day construed by some school authorities as a measure-

ment of the ability and capacity of teachers also. The Bodi incident above stated is an example in point. The irony of the whole situation is that it is not merely managements who are not educational experts but head-teachers who are supposed to be experts, that measure teachers by the eligibility list, averages and percentages. No scientific investigation is necessary to find out the patent causes of bad results at the S. S. L. C. public examination. The factors responsible for efficiency are primarily the tradition of work and of material in a school, the elements of correlation and co-ordination in the organisation of school work, the adoption of sound methods of admission and promotion of boys from class to class, and above all the facilities for teaching and learning a school provides. The factors for producing bad results are the running of schools as business concerns, the levity of educational authorities who impose courses of studies unsuited to the average boy or girl, the want of educational captains in schools to guide school work along educational channels, the insecure service conditions of teachers, the unorganised out-of-work life of pupils, and above all anti-educational practices of coaching and grinding for examinations through special courses and extra-teaching, through a foreign language, regardless of first principles in education. Other things remaining the same, teachers cannot be responsible for efficiency or good results but can hold themselves responsible for honest day to day work only. If each school authority will be guided in educational matters by teachers and by local Teachers' Associations who alone know where the shoe pinches, then it would be right for authorities to hold teachers responsible for work and the results of work. It is up to headmasters and school managers to show by their own conduct and work that they are earnest in making schools efficient by creating the conditions and atmosphere necessary for education on right lines.

TRADE UNIONISM FOR TEACHERS—URGENT.

Apart from what other countries are doing in the matter of trade unionism for intellectual labour, the A. I. F. T. A. as the foremost organisation of teachers in India must make itself a Trade Union before the new reforms. As a result of the recommendations of the Franchise Committee, "labour" in the new constitution has been allotted 8 seats in the Assembly and similar representation is accorded in Provincial Councils. Teachers' organisations which want to do legislative propaganda cannot do better than organise their voting strength and demonstrate their right to public regard through the ballot box as part of organised labour. This is an opportunity for teachers, as intellectual labour, to be officially represented in the councils of the land. Even in the present Assembly elections, if only all eligible teacher-voters make up their mind,—they will be not less than 2,000—they can formulate their educational demands and get them included in party programmes. This step alone will bring teachers' organisations into the currents of public life and help them to get a hearing at call.

THE JUSTICE EDUCATION MINISTRY AT WORK.

Ever since the advent of Dyarchy, the Justice Party has been progressing fairly, thanks to a working majority. This fair start should have been adequate for any political party worth its name to formulate and carry out a nation-wide programme of educational uplift. But it is a tragic fact that the Ministry of Education in succession has been busy about nothing. While professing to stand for the masses, it has, by its University Acts, advanced the interests of the classes. While preaching justice to the non-brahmin masses and equal opportunities, it has by its Elementary Education Act and Councils, kept them educationally at a standstill. While intending to serve education, it has served communalism in educational institutions and this poisoned the very springs of healthy edu-

cational life. Whether by design or by accident, it has reduced teachers to the position of indentured coolies by its studied inaction in respect of the grave service scandals in educational institutions. While professing to be democratic, it has allowed itself to be led by the purse-strings of aristocrats who retard the rise of a politically minded democracy. well grounded in national education whatever teachers may do with their votes in the coming elections must be done with this knowledge of the Justice Ministry's disservice to the cause of education and the teaching profession. Like the recent land tenure legislation in Madras, the handing over of Elementary school masters of Local Boards to each District Board by the Justice Ministry and the G.O. on the salaries of teachers under Local Bodies are moves of electioneering and political importance. Elementary school masters' organisations which are departmentally controlled must free themselves from official fetters, merge themselves in the S. I. T. U. and refuse to be agents of politicians of the scheming variety. The present is a rare opportunity for the S. I. T. U. to embark on a membership campaign and organisation of teacher-voters for the Senates, Councils and the Assembly with a view to defeat the prostitution of teachers as canvassing agents by unscrupulous politicians and to bring about the co-operation of everyone engaged in teaching from the infant school to the University as members of a single great service.

ELEMENTARY EDUCATION IN MADRAS.

It is surprising that the programme of Elementary education of the Ministry is as nebulous as its ideas on "Justice." Successive enquiries have been instituted and reports have been drawn in respect of Elementary education. Fifteen years of direction of the Education Ministry have not been enough to advance compulsion, free education or expansion. The Elementary Educational Councils, under party men of the Ministry, like Elementary education itself, have revealed wastage of educational effort. Proposals to avoid wastage in education and wastage of effort must be included as amendments to the Elementary Education Act. But when proposals are made, as for example, the Champion Scheme, vested interests stand in the way of economy and efficiency, and expansion through consolidation and concentration of educational effort. There is something misleading and suspicious when agencies which have other than educational aims suddenly exhibit nationalistic tendencies and scent danger in the Champion Scheme. The Champion Scheme is a danger to expansion of Elementary education as it has been pursued all these years but it is not a menace to educational expansion by economising wastage or to promotion of efficiency through consolidated schools and concentrated work. The Ministry of Education was keen enough to make the Champion Scheme a G.O. when they wanted to advance education. But now that elections are coming on, political thinking, rather than educational thinking, is responsible for the Ministry's apparent back-sliding from the position taken in the G. O. The Chief Minister's recent public assurance that the scheme was not intended to be applied mechanically to every institution without taking into consideration the interests of various communities and castes concerned is proof positive, not of responsiveness to public opinion, but of election tactics. The Ministry will do well to set forth publicly its goal in Elementary Education and how it proposes to achieve it.

WELL DONE—COCHIN.

The report of the Committee appointed by the Cochin State Government to consider the Director's Educational Survey has a clear cut plan for the control and management of private aided and unaided schools. This plan is just what the S. I. T. U. bill on Teachers' Service conditions expects of the Madras Ministry of Education. The recommendations are well worth recording and they run as follows: (a) Necessity for strict control and supervision of private schools. (b) codification of the relation between Teachers and managers and managers and Government. Managers are to have power of appointment

from among the list furnished to them; to have power of fining and suspending for specific and good reasons and of dispensing with teachers on probation; Managers not to have power of dismissing or dispensing with the services of permanent teachers without previous sanction; disputes between Managers and teachers to be decided by Board of Education; Teachers to have a right of appeal to the Director against orders of Manager and to the Dewan against an order of punishment of the Director.

There is every justification for the Government of Madras adopting a similar policy. The policy of non-intervention is out of date and cannot exist for all time. Whether endowed or unendowed, every educational institution is a public trust which must yield to public scrutiny, public audit and public criticism. Almost all non-government schools have been guilty of some offence against teachers. Teachers as public servants are as much important as managements. It is therefore necessary to eliminate friction between them by statutory provisions for co-operation.

LEAVE RULES FOR TEACHERS IN OTHER LANDS.

(Extracts from a report of the I. L. O. Geneva)

In *Austria*, the leave rules for Teachers are regulated by school holidays. The Federal Act fixes the school holidays at two months through the country. This varies in different provinces and they are fixed by local or district Inspectors according to the seasons. Salaries are paid during the leave-period. Teachers are also granted special leaves with pay from one day to six months for family reasons, sickness, study, etc.

In *Belgium*, the teaching year consists of 460 half-days. The teaching staff enjoy 10 days leave at Easter, six weeks in summer and 8 days at Xmas and New Year. Teachers are granted leave during the school year to attend family ceremonies. In the case of leave for a ceremony in the teachers' own family, pay continues during such leave. In other cases, the teacher must pay the substitute who takes his place.

In *Finland*, paid annual leave is regulated by teaching hours. The act provides for 36 weeks of instruction per year, and where there is *one teacher for 6 classes* in some elementary schools, the period of instruction lasts for 40 weeks.

The work in schools is from September to May, with three weeks holidays at Xmas. During all the rest of the year, the teacher is entitled to be on leave with full salary.

In *Germany*, the school holidays are fixed at 85 days a year, the distribution of these days varying in different states. There is no special leave granted throughout the whole Reich.

In *Hungary*, the school year extends from 6th september to 29th June. The teaching staff whether in schools administered by the state or by private bodies, is entitled to paid leave during the school holidays. Special leave with pay not exceeding 9 days in a year or in exceptional cases up to a maximum of six weeks can be granted by school Inspectors for services rendered, family reasons, civic duties, professional training. The Minitser of Education can allow a further extension of the leave period.

In *Italy*, Royal decrees are in force to grant leave to Inspectors and head-teachers. The period of leave may not exceed a total of one month for each year. The actual teaching staff are entitled in addition to 2 months of school holidays in summer with full pay to special leave for health or family reasons. For health, leave should not exceed two months and that for family reasons should not exceed 15 days.

In *Poland*, paid leave is granted to teachers by an act. After a minimum of three years service, every teacher is entitled to temporary leave for further study for 5 months. Leave for family reasons up to 2 months is granted. A teacher on leave draws his full salary. Teachers in private schools are treated in the same way as teachers in state schools.

In *Rumania*, the general regulations concerning state officials apply to teachers also except as regards the duration of leave. Leave is distributed as follows: a fortnight at Easter, a fortnight at Christmas and 10 weeks in summer. Every teacher is entitled to one month leave in the course of the year.

In *Spain*, school holidays are fixed by an act. Elementary teachers in state schools have 130 holidays in each year. The teacher draws his full pay while on leave. Special leave is granted for family reasons and further study.

In *Switzerland*, paid annual leave is regulated by the Cantonal legislation on Education. The period of leave is from 10 to 12 weeks, distributed according to regulations in each commune. Special leave may be granted. During special leave, the state refunds three quarters expenditure involved while the teacher bears the other quarter himself.

In the U. S. A. (Washington) teachers are paid annually in two instalments. No salary is paid in July and August. Teachers are paid full salary in June and September although they do not teach during these months. Teachers never work on Saturdays and Sundays. The actual number of school days is seldom more than 182 and is often less than 180 days. The period coincides with vacations. Special leave with pay is granted only in the case of teachers who are witnesses in court or who are called in for examinations or called to visit schools. On all other occasions, a substitute at teachers' expense must be provided but the rates of pay for substitutes leave a margin on the normal pay of the teacher. In *Kansas*, leave of absence is provided for purposes of travel or study. In *Maine*, the statutes provide for leave of absence for more than a year or not more than half pay for the purposes of study or travel after not less than 7 years service.

ANGLER.

THE SOUTH INDIA TEACHERS' UNION

NOTICE.

The following District Teachers' Guilds are in arrears of affiliation fee for the years shown against them. Their attention is drawn to Rule 6 (c) of the S. I. T. U. Rules. Rule 6 (c) Arrears. An affiliated guild or association or individual member whose affiliation fee or subscription for the year has not been paid by the 1st December of the official year of the S. I. T. U. shall not be entitled to enjoy the privileges of the Union until the subscription is paid. The names of such associations or individuals shall be removed if they should be in arrears for two years.

| | | |
|--|-------------|-----------|
| 1. Chingleput District Teachers' Guild. | * 1932—1933 | 1933—1934 |
| 2. South Arcot District Teachers' Guild. | | 1933—1934 |
| 3. Ramnad District Teachers' Guild. | | 1933—1934 |
| 4. Tinnevely District Teachers' Guild. | | 1933—1934 |

* In case of Chingleput only a part payment has been made for the year 1932—1933.

Associations :

1. Teachers' Association, Kodaikanal.
2. Teachers' Association, B. H. School, Yellamanchalli.
3. Teachers' Association, Chintadripet High School, Chintadripet.

T. P. SRINIVASAVARADAN,

Treasurer.

THE TEACHERS' BOOKSHELF

Outlines of the Geography of the World: By G. Srinivasa Iyer, B.A., L.T., with a foreword by W. Turner, M.A., Principal, Nizam's College, Hyderabad. Part I: The Southern Continents and North America. Published by Messrs. Srinivasavaradachari & Co., Mount Road, Madras. Price As. 12. Crown 8vo. pp. 184.

This book has been written according to the "A" group Geography S. S. L. C. scheme. As Mr. Turner observes in his foreword, "There is no royal road to geographical knowledge or a substitute for proper and practical teaching. I consider the present work of Mr. G. Srinivasa Iyer to be one of the best I have seen. There is a wealth of pictorial interest and an abundance of practical illustration and a simplicity and clarity of treatment which should make a refreshing appeal to teachers and pupils. This work should supply a long felt want and make the Geography lesson what it should be; a period of warm and human interest, instead of a period of drudgery." The plan and features of this book are set forth as follows in the author's preface.

"Importance is given to man's intelligent control over nature as well as to the influence of natural condition's of man's life. The treatment of the subject is so planned as to enable the students to understand the fundamental facts that primary principles and to make his way intelligently through the subject stage by stage. Questions and exercises are so framed as to make the study practical and real to enable the student to satisfy himself that he is on sure ground in his onward march. Great care has been taken to make the language simple and the matter clear to the students just at the beginning of the High school course." There are 67 maps and diagrams and 17 full page illustrations of sceneries. The book is well printed and neatly bound in boards.

The Elements of Analytical Geometry: By J. T. Brown, M.A., B.Sc., and C. W. Manson, M.A. Macmillan & Co., Ltd., 1934. Part I: The Straight Line, 2sh. Part II: The Circle, 1sh. 6d.

These are the first two parts of a book intended to be an introduction to Analytical Geometry. The subject-matter is very well developed; main topics are dealt with in the several articles of each chapter; each article is followed by notes, which contain either important corollaries or alternative methods, and by illustrative examples fully worked out.

The use of the projections of a line on the axes in the proofs of the earlier theorems, the introduction of gradients earlier than usual, the elegant methods employed for deriving the equation of the pair of tangents from a point to a circle, and the use of the notion of 'power' in dealing with radical axis and co-axial circles, are some of the distinctive features of the book. Determinant forms for many of the results prove attractive, and I would suggest to the authors the incorporation of these in the notes, when the next edition comes to be prepared. The printing and get up are excellent.

This book when completed by the publication of Part III dealing with Conic Sections will be quite suitable as text-book for the Intermediate and Pass B.A. and B.Sc., courses in our Universities. This may well replace most of the books now in use.

G. A. SRINIVASAN.

Mensuration and Elementary Surveying: By Rai Sahib R. L. Banerjee. Macmillan & Co., Ltd. 1934.

This book deals with all the types of mensuration problems and contains a large collection of exercises, including examination questions. It is sure to be of considerable use for students of engineering. There is very little of surveying dealt with in the book to justify its title.

The book contains a large number of figures which are neatly done. The printing seems to be good, except for a slip on the cover page where the author is stated to be an author also of a book on "Surveying and Delaying." The historical information given in the foot-notes is an interesting feature. A synopsis of the formulae for areas and volumes would have enhanced the value of the book.

G. A. SRINIVASAN,

A Junior History of India: By Prof. V. Rangachariar, M.A., Price Rs. 2. (The Indian Publishing House, Ltd., Madras.).

This book answers completely to the requirements of the present syllabus of the S. S. L. C. It embodies also the latest researches made by scholars of eminence. It is full of maps and beautiful illustrations. The arrangement, selection, collection and combination of important facts of the History of our Mother Land are admirable. The language of the book could have been easier. It will be adequate as a text-book of C. Group Indian History.

N. KRISHNAMACHARI.

NEWS AND NOTES

THE NEW S. S. L. C. BOARD.

The following persons have been appointed as members of the S. S. L. C. Board for a period of three years from the 15th July 1934 :

Mr H. C. Papworth, Principal, Presidency College, Madras.
M.R.Ry. T. S. Krishnamoorthy Iyer Avl., D. E. O., Madras.
M.R.Ry. S. Balakrishna Iyer Avl, Lecturer, Teachers' College, Saidapet.
Miss M. M. Mehta, Lecturer in Chemistry, Queen Mary's College, Madras.
Muhammad Abdus Salaam Sahib Bahadur, D. E. O., Guntur.
Miss E. McDougall, Principal, Women's Christian College, Madras.
The Rev L. Vion, S.J., Professor, Loyola College, Madras.
M.R.Ry. G. Gurubatham Avl, Headmaster, S. P. G. High School, Nandyal.
M.R.Ry. M. K. R. Dikshithalu Avl., Headmaster, Municipal H. S., Bimilipatam.
Sriman P. Mahanty Mahasayao, Principal, Khallikota College, Berhampore.
M.R.Ry. C. S. Srinivasachariar Avl., Professor, Annamalai University.
M.R.Ry. M. G. Sitarama Rao Garu, Headmaster, Board High School, Chittoor.
M.R.Ry. P. C. Moses Avl., Lecturer, Andhra Christian College, Guntur.
The Rev. G. P. James, Headmaster, American Mission High School, Pasumalai.

The Madura District Teachers' Guild held their annual meeting on the 14th instant.

The annual meeting of the North Arcot District Teachers' Guild will be held on the 11th August.

The Bangalore Educational Society has resolved to celebrate an Education Week about the 11th August. Sir M. M. Ismail is expected to inaugurate the week and Mr. I. N. Menon, D. P. I., Cochin, is expected to preside over the celebrations.

TWELVE REASONS !

Why you should prefer THE NEW ERA ENGLISH READERS

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Approved by the Text-Book Committee, Madras.

EDITED BY

H. CHAMPION, M.A., I.E.S.

BY

M. S. SUNDARESWARAN, M.A., L.T.

AND

A. S. VENKATARAMAN, B.A., L.T.

In many respects the *New Era English Readers* strike out a new path in the principles of Foreign Language Teaching. They have many commendable features, only a few of which are mentioned here.

(1) The latest principles accepted and advocated by authorities on Modern Language Learning have been followed.

(2) The problem of English Teaching in India being very largely the problem of the beginners' stage, emphasis has been laid on the linguistics, 'the facts of language' and the language units which are not always the single words, but the phrases and idioms which enrich the English language.

(3) The aims of the series embrace, not only an ability to read, but also an ability to speak and write English.

(4) The subject-matter of the lessons is the out-come of a judicious combination of scenes of Indian life and Western life, and the approach to Western knowledge and culture is made through familiar matter in a new garb, most of the English Readers being rendered unsuitable to Indian Schools because of their treatment of exclusively English Scenes

(5) Interest in the lessons is sought to be stimulated by adapting the subject-matter to the ages, temperament and tastes of Indian children.

(6) The lessons are carefully graded, from the point of view of a word and phrase scheme, and a grammar scheme. The principle, "*From the known to the unknown*" has been adopted

(7) Corresponding to a passive stage in the acquisition of a mother-tongue by a child, there must be a passive stage in a foreign language study and this has been duly recognised in Primer I.

(8) All modern methods of teaching are meant to exercise the self-activity of children and the emphasis, therefore, has been shifted from *teaching* to *learning* a foreign language. With this end in view, exercises on the use of English have been given to enable the pupils to master the new language form in every lesson.

(9) Few instructions have been given to the teacher for the reason that the use of the Readers is self-explanatory.

(10) The use of the vernacular in explanations is not taboo.

(11) Language learning being a matter of habit, memorizing certain forms of expression is encouraged.

(12) The illustrations are meant to illuminate a situation more than the single words.

Specimen copies will be sent on application.

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EDITORIAL

MODERNISM.

This is just the occasion when the more vocal among the parents ask a number of questions. Do the children want all these books? What is the need for so many note-books? Why should teachers make education costly and deprive the poor boy of the chance of higher education? Questions of this type are a challenge to the teaching profession and it is essential that the public should be enlightened on these matters. Our complaint is that our vocal critics do not choose to acquaint themselves with the needs and methods of the modern school. They often presume too much and show by their 'Sir Oracle' attitude little inclination to listen to expert advice. It is their feeling that what was good for themselves in their good old days should be good for their children. We never thought that the observation of Dr. Richardson quoted in the editorial note of "Up-to-date-ness" in our last issue could be so true to life. The so-called "wide-awake man" is after all surprisingly indifferent to the adoption of modern methods of instruction. It is a pity that he should begin to indulge in uncomplimentary remarks against schools and educators. The teacher has to perform the difficult task of educating the educated layman. Criticism of a similar nature appears now and then in the press and we appeal to our critics to visit the school and learn from the teacher the why and the wherefore of the requirements before seeking the columns of the press.

It is obvious that the public have no clear notion of what is being done for children in schools. There may be some persons who may even feel that they have to satisfy the "irresponsible demands" of the teacher. The staff of a school should consider it worthwhile to invite periodically select groups of parents and give them an opportunity of seeing it at work. How can note-books be avoided when instruction in a number of subjects, such as Geography, Drawing, and Arithmetic is given? Should not note-books be required for exercises in composition, in English and mother-tongue? The well-intentioned but ill-informed parents should be given a chance to see how a properly planned system of note-books is sure to promote neatness of execution, clear thinking and proper assimilation of knowledge. It will be a great advantage if, during the Education Week, care be taken to exhibit for the benefit of parents the note-books of students whether good or bad. They will then be easily impressed with the necessity for equipping the boy properly. It may not be known to many that the note-books required to be kept by children in English schools are far more than what is being demanded in our schools.

There is again the complaint regarding the change of text-books. We do not wish to state anything more than that our critics are unfair to teachers. They seem to think that text-books are changed for the mere fun of it. It is not at all uncommon to see several text-books being retained for three or more years in several schools. It may be that the change, made after some years in the normal course for sound educational reasons, happens to cause inconvenience to a particular critic at a given moment. We should like to ask him whether he is serious when he argues that there can be no difference between books and books in History, Arithmetic or Science. This is a startling assumption and a teacher who means to do his best for the pupil should be free to suggest all facilities. A good parent will be doing the proper thing if he is willing to be guided by the expert in such matters.

Very often the critics want the public to imagine that they are pleading the cause of the poor pupils. We learn that the cost of books and note-books required of a pupil in the Middle school may not exceed seven rupees while the pupil in the High school may require ten to fifteen rupees. This small amount may be beyond the means of the poor parent but it is essential to remember that higher education is not for the pupils who cannot afford to spend even this small amount. The standard cannot be lowered on account of the consideration of poverty. A good number of the poor pupils may not be able to profit by their stay in High school owing to incapacity and it is good that they are diverted to other channels as early as possible. As for the remaining few who can do well, it is essential that the critics who profess tenderness should collect donations and organise a fund for poor boys. They should use their influence with the Government in securing fee concessions and thus free the poor pupils from the serious handicaps. This is the proper remedy to be adopted in the interest of the pupils themselves. The teachers will be glad to co-operate with the public in any such programme of useful work.

It has been authoritatively stated that our children are not trained to make a proper study of suitable books. To deny facilities to pupils is to let them grow in a narrow groove. The educational value of well-illustrated books can never be over-estimated. Children find pleasure in good books and the psychological effect cannot be ignored. Books are usually prescribed by the entire staff at a meeting and parents need not labour under any impression that due regard has not been paid to the circumstances of the Indian families. Teachers also are parents and they may reasonably be expected to bear in mind the difficulties of parents. We hope the parents will realise the wisdom of allowing the teacher to choose his own instruments for the instruction of their children.

THE S. S. L. C. SCHEME.

The personnel of the re-constituted Secondary School Leaving Certificate Board has been announced and the list is published elsewhere. The retiring S. S. L. C. Board showed its activity by getting the S. S. L. C. Scheme revised in a manner not wholly acceptable to the teaching profession. The correspondence from the Director of Public Instruction bearing on the re-modelling of the S. S. L. C. scheme, was published in full in the dailies and a clever attempt has been made to throw the responsibility for revision on the Universities and the teaching profession. Teachers might have been complaining that the syllabuses were heavy; and the colleges might be feeling that the single optional subject did not take a student far enough. Is there any likelihood of teachers being satisfied with the revised scheme? Is the revised scheme likely to give a better preparation for students intending to proceed to the University. It will not be long before the need for change will be urged. The Academic Council of the Madras University has changed its mind rapidly. Who is responsible for the new scheme that will not satisfy any group? The revised scheme has been approved by the retiring S. S. L. C. Board and it is to come into force immediately. The first examination under the new scheme will be held in March 1937 and it is also proposed to set papers under the old scheme for the benefit of the existing candidates.

The syllabuses in different subjects have been scrutinised and new syllabuses have been prepared in the case of those subjects prescribed for study up to the IV form. Special committees were appointed for the different subjects and the point of view to be borne in mind in the preparation of the syllabus

bus was explained to the committees by the Director. The old S. S. L. C. Board retired after giving their final approval to the syllabuses proposed by the committees. The new Board has a number of members who can claim direct connection with the work of the High school and we hope that the Board will safeguard the interest of Secondary education and will not allow it to be influenced unduly by external agencies.

There is one important point to be mentioned in regard to Elementary Science. The name of this subject has been aptly changed into General Science and the Board has realised the desirability of including the elements of Animal and Plant Life in the course for IV form. The entire scheme of Elementary Science in the Middle school classes has also been revised so that the course in General Science may be complete so far as it goes. In the preparation of the syllabus in General Science, it has been found desirable to follow the practice obtaining in western countries. The different subjects under General Science will not hereafter be taught as separate sciences independent of one another. The topics are arranged under a number of easily recognised human activities and an attempt is made to bring the pupil into contact with all objects and phenomena of scientific interest in the modern world. The General Science course is not a course designed primarily to give scientific training, a task which is allotted to the optional group. It seeks to enable the large number of pupils to take an intelligent interest in what is going on about them and to appreciate how scientific knowledge and discoveries have enabled man to understand nature and utilise the forces of nature towards the improvement of his lot. The concentric system of teaching has been recommended and the topics will therefore be taken in all the four forms. The ground expected to be covered may appear vast but it is left to the teacher to determine how far he can proceed in respect of each topic considering the locality and the capacity of the pupil. A charge has been frequently levelled at our pupils by competent examining boards that our pupils betray woeful lack of general knowledge. This defect is supposed to be due to the fact that the subjects taught in schools are not directly related to what they often see and handle. There is a general feeling that the teaching of Science is too academic to rouse their interest and to stimulate their curiosity. Hence the framers of the General Science syllabus have been required to give prominence to things and activities in which the pupils are deeply interested so that they may be induced to pursue their study of nature further. For the proper teaching of General Science, a decent museum containing the varied materials will be of great value and teachers may begin from now to build up a museum. The pupils will be able to render valuable help in this connection and a collection of appropriate pictures from illustrated periodicals should be possible. Large wall-diagrams may be prepared with the help of the drawing master and they may be useful aids to the teaching of General Science. There are a number of good books on General Science in the field and though the arrangement of the topics is on a different plan, they offer very excellent tips in regard to the presentation of the subject-matter in a manner that will effectively appeal to the pupil. A list of such books will be published in our next issue. It is natural that some difficulty may be experienced by teachers, when they have to deal with important topics at a stage when the pupil may not be ripe enough to understand the full significance. There is no doubt that teachers who have always evinced a real interest in the teaching of Science, will rise equal to the occasion. Science teachers in a school may sit together and adopt a plan for the teaching of General Science. They will do well to note the defects in the course during their actual teaching. A record of such experience will

become valuable when a revision of the syllabus will be undertaken. The columns of the journal are always available for a record of such experience in respect of every subject included in the curriculum and we appeal to teachers to take advantage of the facilities offered by the journal so that the opinion of teachers on the different aspects of the scheme may be made known to the authorities and the public.

OBITUARY

We deeply regret to record the death of Prof. P. Lakshminarasu. In his death, the educational world has lost a great teacher. For several years he held with distinction the post of Professor of Physics in the Pachappa's College, Madras. A man of great intelligence, he deliberately chose the



Late Prof. P. Lakshminarasu

profession of Teaching in preference to other more lucrative jobs. Till the end he stood bravely by his conviction. He was never afraid of expressing an opinion even if the whole world were opposed to him. He always held his colleagues in the Teaching Profession in high esteem. In the early days of the Madras Teachers' Guild he took a prominent part in its activities and was one of those great pioneers who ushered into existence the South India Teachers' Union. He presided over the deliberations of the Provincial Educational Conferences held in Madura and Nellore in May 1912 and 1915 respectively. Even after his retirement from the college he continued to have his interest in the profession and was ever ready to obey the call of the Teachers' Guild or the S. I. T. U. It was only last year he unveiled the portraits of the

late Profs. K. B. Ramanathan and P. Subramanya Iyah. He was keeping good health and the news of his sudden death was indeed a shock and surprise to many. We offer our sincere condolences to the members of his family and hope that the Teaching Profession will adequately respond to the call to commemorate his memory in a fitting manner.

THE XXVI PROVINCIAL EDUCATIONAL CONFERENCE, ANANTAPUR

CIRCULAR NO. 2.

Under Rule 17 (c) of the Rules of the South India Teachers' Union, your association is invited to nominate six persons who are eligible for the Presidentship of the Conference to be held in December 1934 at Anantapur. The names may kindly be communicated to reach this office on or before Friday 10th August, 1934.

Note :—While proposing names, please bear in mind those that are likely to accept the Presidentship.

C. RANGANATHA AIYENGAR,
General Secretary.

CIRCULAR NO. 3.

The Twenty-sixth Provincial Educational Conference will be held at Anantapur in the last week of December 1934.

Educational Organisations, Teachers' Associations and individuals interested in Education are invited to forward Resolutions for consideration at the Conference and send papers, if any, on subjects to be read at the Conference. Each paper should be accompanied by a short abstract of the matter, which will be printed if approved by the 'Papers' committee.

An Educational Exhibition will be held to include exhibits on various phases of school and college work.

Please get them ready from now and you will be informed later when and where to send them.

Resolutions and papers should be sent so as to reach the office not later than 15th September 1934.

C. RANGANATHA AIYENGAR,
General Secretary.
